APPENDIX E

ROCKAWAY DELIVERY LATERAL PROJECT PROJECT-SPECIFIC WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES



Transcontinental Gas Pipe Line Company, LLC

Rockaway Delivery Lateral Project Project-Specific Wetland and Waterbody Construction and Mitigation Procedures

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WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES

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I. APPLICABILITY

A. Transcontinental Gas Pipe Line Company, LLC (Transco) has prepared this Project-specific Wetland and Waterbody Construction and Mitigation Procedures (Transco Procedures) for the Rockaway Delivery Lateral Project (Project) to meet or exceed the best management practices (BMPs) and mitigation measures included in the Federal Energy Regulatory Commission (FERC) Wetland and Waterbody Construction and Mitigation Procedures (FERC Procedures). The intent of the Transco Procedures document is to identify baseline mitigation measures for minimizing erosion and sediment transport to wetlands and waterbodies, in addition to limiting adverse impacts to aquatic habitats and water quality downstream of waterbody crossings. The Transco Procedures will also be provided to the contractor(s) and inspectors who will be constructing the pipeline on behalf of Transco.

Where the Transco Procedures depart substantially from the FERC Procedures, the Project-specific text is highlighted as **bold text**. Other changes throughout the Transco Procedures are noted in *italics*. Very minor formatting changes (e.g., "project sponsor" to "Transco", "should" to "will", etc.) are not specifically called out in the Transco Procedures text.

Once the Project is certificated, further changes can be approved only upon the submittal of a written request from Transco to the Director of the Office of Energy Projects (Director), and if the Director agrees that an alternative measure:

- 1. provides equal or better environmental protection;
- is necessary because a portion of the Transco Procedures is infeasible or unworkable based on project-specific conditions; or
- is specifically required in writing by another federal, state, or Native American land management agency for the portion of the project on its land or under its jurisdiction.

Project-related impacts on uplands are addressed in Transco's Upland Erosion Control, Revegetation, and Maintenance Plan (Transco Plan).

B. DEFINITIONS

- 1. "Waterbody" includes any natural or artificial stream, river, or drainage with perceptible flow at the time of crossing, and other permanent waterbodies such as ponds and lakes:
 - a. "minor waterbody" includes all waterbodies less than or equal to10 feet wide at the water's edge at the time of crossing;
 - b. "intermediate waterbody" includes all waterbodies greater than 10 feet wide but less than or equal to 100 feet wide at the water's edge at the time of crossing; and
 - "major waterbody" includes all waterbodies greater than 100 feet
 wide at the water's edge at the time of crossing.
- 2. "Wetland" includes any area that is not in actively cultivated or rotated cropland and that satisfies the requirements of the current federal methodology for identifying and delineating wetlands.

II. PRECONSTRUCTION FILING

- A. The following information shall be filed with the Secretary prior to the beginning of construction:
 - the hydrostatic testing information specified in section VII.B.3. and a wetland delineation report as described in section VI.A.1., if applicable; and
 - 2. a schedule identifying when trenching or blasting would occur within each waterbody greater than 10 feet wide, or within any designated coldwater fishery. Transco shall revise the schedule as necessary to provide FERC staff at least 14 days advance notice. Changes within this last 14-day period must provide for at least 48 hours advance notice.
- B. The following site-specific construction plans required by these Transco Procedures must be filed with the Secretary for the review and written approval by the Director:
 - plans for extra work areas that would be closer than 50 feet from a waterbody or wetland;

- 2. plans for major waterbody crossings;
- 3. plans for the use of a construction right-of-way greater than 75 feet wide in wetlands; and
- 4. plans for horizontal directional drill (HDD) "crossings" of wetlands or waterbodies.

III. ENVIRONMENTAL INSPECTORS

- A. At least one Environmental Inspector having knowledge of the wetland and waterbody conditions in the Project area is required for each construction spread. The number and experience of Environmental Inspectors assigned to each construction spread will be appropriate for the length of the construction spread and the number/significance of resources affected.
- B. The Environmental Inspector's responsibilities are outlined in the Upland Erosion Control, Revegetation, and Maintenance Plan (Plan).

IV. PRECONSTRUCTION PLANNING

- A. A copy of the Stormwater Pollution Prevention Plan (SWPPP) prepared for compliance with the U.S. Environmental Protection Agency's (EPA) National Stormwater Program General Permit requirements must be available in the field on each construction spread. The SWPPP shall contain Spill Prevention and Response Procedures that meet the requirements of state and federal agencies.
 - Transco assumes the responsibility for its contractors to structure their operations in a manner that reduces the risk of spills or the accidental exposure of fuels or hazardous materials to waterbodies or wetlands. Transco shall, at a minimum, ensure that:
 - a. all employees handling fuels and other hazardous materials are properly trained;
 - all equipment is in good operating order and inspected on a regular basis;
 - fuel trucks transporting fuel to on-site equipment travel only on approved access roads;

- d. all equipment is parked overnight and/or fueled at least 100 feet from a waterbody or in an upland area at least 100 feet from a wetland boundary.
- e. hazardous materials, including chemicals, fuels, and lubricating oils, are not stored within 100 feet of a wetland, waterbody, or designated municipal watershed area, unless the location is designated for such use by an appropriate governmental authority. This applies to storage of these materials and does not apply to normal operation or use of equipment in these areas; and
- f. concrete coating activities of the pipeline will occur at a coating plant before being shipped to the site. Grout material will be installed in impermeable mats as part of the in-water construction activity to reduce the amount of time needed to install the mats.
- 2. Transco assumes the responsibility for its contractors to structure their operations in a manner that provides for the prompt and effective cleanup of spills of fuel and other hazardous materials. At a minimum, Transco and its contractors must:
 - ensure that each construction crew (including cleanup crews) has
 on hand sufficient supplies of absorbent and barrier materials to
 allow the rapid containment and recovery of spilled materials and
 knows the procedure for reporting spills;
 - ensure that each construction crew has on hand sufficient tools and material to stop leaks;
 - know the contact names and telephone numbers for all local, state, and federal agencies (including, if necessary, the U. S.
 Coast Guard and the National Response Center) that must be notified of a spill; and
 - d. follow the requirements of those agencies in cleaning up the spill, in excavating and disposing of soils or other materials contaminated by a spill, and in collecting and disposing of waste generated during spill cleanup.

B. AGENCY COORDINATION

Transco will coordinate with the appropriate local, state, and federal agencies as outlined in these Transco Procedures and in the Certificate.

V. WATERBODY CROSSINGS

A. NOTIFICATION PROCEDURES AND PERMITS

- 1. Apply to the U.S. Army Corps of Engineers (COE), or its delegated agency, for the appropriate wetland and waterbody crossing permits.
- Provide written notification to authorities responsible for potable surface water supply intakes located within 3 miles downstream of the crossing at least 1 week before beginning work in the waterbody, or as otherwise specified by that authority.
- 3. Apply for state-issued waterbody crossing permits and obtain individual or generic section 401 water quality certification or waiver.
- 4. Notify appropriate state authorities at least 48 hours before beginning trenching or blasting within the waterbody, or as specified in state permits.

B. INSTALLATION

1. Time Window for Construction

Unless expressly permitted or further restricted by the appropriate state agency in writing on a site-specific basis, in-stream work, except that required to install or remove equipment bridges, must occur during the following time windows:

- a. coldwater fisheries June 1 through September 30; and
- b. coolwater and warmwater fisheries June 1 through November 30

2. Extra Work Areas

a. Generally locate extra work areas (such as staging areas and additional spoil storage areas) at least 50 feet away from water's edge, except where the adjacent upland consists of actively cultivated or rotated cropland or other disturbed land.

- b. Transco will file with the Secretary for review and written approval by the Director, a site-specific construction plan for each extra work area with a less than 50-foot setback from the water's edge, (except where the adjacent upland consists of actively cultivated or rotated cropland or other disturbed land) and a site-specific explanation of the conditions that will not permit a 50-foot setback.
- c. Limit clearing of vegetation between extra work areas and the edge of the waterbody to the certificated construction right-of-way.
- d. Limit the size of extra work areas to the minimum needed to construct the waterbody crossing.

3. General Crossing Procedures

- Comply with the COE, or its delegated agency, permit terms and conditions.
- Construct crossings as close to perpendicular to the axis of the waterbody channel as engineering and routing conditions permit.
- If the pipeline parallels a waterbody, attempt to maintain at least
 15 feet of undisturbed vegetation between the waterbody (and any adjacent vegetation) and the construction right of way.
- d. Where waterbodies meander or have multiple channels, route the pipeline to minimize the number of waterbody crossings.
- e. Maintain adequate flow rates to protect aquatic life, and prevent the interruption of existing downstream uses.
- f. Waterbody buffers (extra work area setbacks, refueling restrictions, etc.) must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground-disturbing activities are complete.

4. Spoil Pile Placement and Control

- a. Transco will place spoil from minor and intermediate waterbody crossings, and upland spoil from major waterbody crossings, in the construction right-of-way at least 10 feet away from the water's edge or in additional extra work areas as described in section V.B.2.a.
- b. Use sediment barriers to prevent the flow of spoil or heavily siltladen water into any waterbody.

5. Horizontal Directional Drill (HDD)

To the extent they were not provided as part of the precertification process, for each waterbody or wetland that would be crossed using the HDD method, provide a plan that includes:

- (1) site-specific construction diagrams that show the location of mud pits, pipe assembly areas, and all areas to be disturbed or cleared for construction;
- (2) a description of how an inadvertent release of drilling mud would be contained and cleaned up; and
- (3) a contingency plan for crossing the waterbody or wetland in the event the directional drill is unsuccessful and how the abandoned drill hole would be sealed, if necessary.

6. Crossings of Major Waterbodies

Before construction, Transco will file with the Secretary for the review and written approval by the Director a detailed, site-specific construction plan and scaled drawings identifying all areas to be disturbed by construction for each major waterbody crossing (the scaled drawings are not required for any offshore portions of pipeline projects). This plan will be developed in consultation with the appropriate state and federal agencies and will include extra work areas, spoil storage areas, sediment control structures, etc., as well as mitigation for navigational issues.

The Environmental Inspector may adjust the final placement of the erosion and sediment control structures in the field to maximize effectiveness.

7. Trench Dewatering

Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in heavily silt-laden water flowing into any waterbody. Remove the dewatering structures as soon as possible after the completion of dewatering activities.

C. RESTORATION

- 1. Revegetate disturbed riparian areas with conservation grasses and legumes or native plant species, preferably woody species.
- Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent that are less than 50 feet from the waterbody, or as needed to prevent sediment transport into the waterbody. In addition, install sediment barriers as outlined in the Transco Plan. In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the waterbody.
- 3. Sections V.C.1. through V.C.2. above also apply to those perennial or intermittent streams not flowing at the time of construction.

D. POST-CONSTRUCTION MAINTENANCE

1. Limit vegetation maintenance adjacent to waterbodies to allow a riparian strip at least 25 feet wide, as measured from the waterbody's mean high water mark, to permanently revegetate with native plant species across the entire construction right-of-way. However, to facilitate periodic pipeline corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be maintained in an herbaceous state. In addition, trees that are located within 15 feet of the pipeline that are greater than 15 feet in height may be cut and removed from the permanent right-of-way.

2. Do not use herbicides or pesticides in or within 100 feet of a waterbody except as allowed by the appropriate land management or state agency.

VI. HYDROSTATIC TESTING

A. NOTIFICATION PROCEDURES AND PERMITS

- 1. Apply for state-issued water withdrawal permits, as required.
- 2. Apply for National Pollutant Discharge Elimination System (NPDES) or state-issued discharge permits, as required.
- Notify appropriate state agencies of intent to use specific sources at least 48 hours before testing activities unless they waive this requirement in writing.

B. GENERAL

- 1. Perform non-destructive testing of all pipeline section welds or hydrotest the pipeline sections, before installation under waterbodies or wetlands.
- 2. If pumps used for hydrostatic testing are within 100 feet of any waterbody or wetland, address the operation and refueling of these pumps in the project's Spill Prevention and Response Procedures (see Appendix 1C of Resource Report 1 "Project Description").
- Transco shall file with the Secretary before construction a list identifying the location of all waterbodies proposed for use as a hydrostatic test water source or discharge location.

C. INTAKE SOURCE AND RATE

- 1. Screen the intake hose to prevent entrainment of fish.
- 2. Do not use state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless appropriate federal, state, and/or local permitting agencies grant written permission.
- Maintain adequate flow rates to protect aquatic life, provide for all waterbody uses, and provide for downstream withdrawals of water by existing users.

4. Locate hydrostatic test manifolds outside wetlands and riparian areas to the maximum extent practicable.

D. DISCHARGE LOCATION, METHOD, AND RATE

- 1. Regulate discharge rate, use energy dissipation device(s), and install sediment barriers, as necessary, to prevent erosion, streambed scour, suspension of sediments, or excessive streamflow.
- 2. Do not discharge into state-designated exceptional value waters, waterbodies which provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies, unless appropriate federal, state, and local permitting agencies grant written permission.